Classification of Image Blocks by Region Contrast Significance and Uses Therefor in Selective Image Enhancement in Video and Image Coding.

ABSTRACT OF THE DISCLOSURE

Determining image block significance based on region contrast, including partitioning an image into multiple regions of at least one pixel each, pairing any region with an unpaired, adjoining region, calculating a similarity value for any region pair, merging paired regions of any pair into a single region, where the region pair to be merged has a predefined similarity value, thereby creating a new image partition of multiple regions, repeatedly performing the preceding steps, thereby obtaining a sequence of image partitions, selecting within the image an image sub-area of a predefined size and shape, identifying a partition in the sequence in which the image sub-area is covered by any region to the extent of a predefined coverage measure, and calculating a region contrast significance value of the image sub-area as a value which is proportional to the position of the identified partition in the sequence.